1.**Introduction to Supply Chain Management** Career-Technical Articulation Number (CTAN) alignment with the Supply Chain Management Pathway in the Career Field Technical Content Standards of the Ohio Department of Education.

General Course Description: This course provides an overview of Supply Chain Management including its role and purpose across organizations, the various strategies and techniques used to improve organizations, analysis and performance measurement tools to ensure improvement, the integration of technology into the supply chain and global and emerging issues impacting the financial, legal, environmental and security aspects of organizations.

Advising Notes:

-Student must matriculate into an institution of higher education NO LATER than 3 years after completing the tech prep program and graduating from high school/career center.

- Upon completion of program, student must earn a passing grade on the end of course CETE exam

Semester Credit Hours: 3

Alignment:

Learning Outcomes The student will be able to:	**Competencies and/or Descriptors from the Supply Chain Management Pathway, Career Field Technical Content Standards/ Courses**
1. Demonstrate basic understanding of the principles of Supply Chain Management (SCM) and its role and purpose within the larger business environment and define the term “supply chain management”.	2.1.11 Differentiate between operations and supply chain, and describe their components, or activities, and contributions to business. 6.1.11 Explain the role of supply chain management and its contributions to business operations; and identify its activities, measures and issues. 7.7.3 Describe supply chain’s impact on customer satisfaction and perceived value. 7.7.4 Describe supply chains, and explain their integration with and influence on business activities and functions (e.g., product development, production, marketing, finance). 2.4.2 Identify types of business processes, their purposes (e.g., added customer value, increased efficiencies), their characteristics, their components (e.g., events, activities, decision points, metrics) and their interrelationships.
2. Explain common SCM	7.2.1 Differentiate among purchasing, procurement and sourcing.

strategies, techniques and procedures and when these may be used within differing business environments.	7.2.7 Determine organizational strategies (e.g., quality, availability, productivity, sustainability, supply chain management, corporate social responsibility, ethical business practices) impacting expense control options, and incorporate them into expense control plans. 7.2.9 Identify opportunities to incorporate operational objectives into the procurement process (e.g., supplier diversity initiatives, supply chain management goals, regulatory compliance). 7.3.3 Describe the factors considered in establishing inventory thresholds (e.g., tolerance for stock-outs, supply chain process goals). 7.6.1 Explain the elements that influence the design of transportation, distribution, and logistical strategies (e.g., geographical locations, transportation costs, storage capacities, process design, regulations). 7.6.6 Explain the impact of packaging on achievement of organizational goals, and choose appropriate packaging materials to pack products. 7.3.15 Describe how inventory management principles apply to intangible services (e.g., monitoring queues and capacity planning for website transactions such as insurance). 7.3.2 Identify the advantages and disadvantages of Just-in-Time(JIT) inventory processes. 7.6.11 Analyze reverse logistics' costs, and describe strategies used to reduce costs.
3. Discuss key concepts of SCM performance measurement, common metrics and analysis tools used in SCM decision making.	7.3.12 Assess distribution strategies (sales or stock performance, inventory status or performance) using performance metrics. 7.3.7 Evaluate the effectiveness and efficiency of a production schedule. 7.6.9 Describe commonly used metrics for evaluating transportation efficiency and effectiveness.
4. Identify various types of SCM information systems, communication methods/systems, and technology used within the business environment.	2.3.8 Describe the impact of digital communication tools (e.g., Internet, video and computer conferencing, webcasts, email, social media, digital communications) on global business activities. 7.7.5 Trace and track the end-to-end supply chain network. 7.7.6 Measure supply chain effectiveness, efficiency, adaptability, and sustainability.
5. Explain how SCM is effected by global and emerging trends to including the impacts of	1.11.4 Determine how the quality, quantity and pricing of goods and services are affected by domestic and international competition in a market economy.

financial, environmental, legal, and security issues.	2.3.2 Describe market-entry strategies for conducting business globally (e.g., import and export, technology licensing, franchising, wholly owned branch and subsidiary operations, joint ventures, consortia) and the considerations impacting the decision to offer goods or services globally. 2.3.5 Describe the impact of the political environment on global trade (e.g., type of government, political stability, government policies about business). 2.3.11 Explain the nature of global legal systems (e.g., civil or code, common, statutory), their impact on global trade and the approaches and legal recourse available to resolve disputes in global markets. 2.3.13 Describe costs associated with global business, methods used to analyze those costs and the role of outsourcing and offshoring in cost management. 2.3.14 Describe customs regulations, their impact on global business and the government agencies that facilitate trade. 7.2.3 Evaluate the impact of using global sources. 7.7.10 Compare challenges in supply chain design and operations for national and multinational organizations. 7.8.2 Identify foreign influences that increase the risk of routine and nonroutine operational failures in multinational corporations. 2.3.7 Explain the impact of a country's economic development on global trade (e.g., type of economic system, natural resources, educational level, types of industries, infrastructure, technology availability or adoption). 2.3.6 Explain the impact of a country's or area's geography and history on global trade. 7.7.7 Evaluate risk factors and social economic trends affecting supply chain systems and the range of decisions available to management (e.g., sustainability focus, industry self-regulatory standards, globalization).
6. Explain how logistics warehouse management systems, distribution requirements planning and inventory management can impact cost and customer service.	7.3.2 Identify the advantages and disadvantages of Just-in-Time (JIT) inventory processes. 7.3.3 Describe the factors considered in establishing inventory thresholds (e.g., tolerance for stockouts, supply chain process goals). 7.3.7 Evaluate the effectiveness and efficiency of a production schedule. 7.3.14 Determine potential inventory issues, and develop backup options to obtain needed materials and maintain operations. 7.6.4 Analyze the impact of warehouse size and space layout on inventory management options, materials handling, and logistical requirements. 7.6.11 Analyze reverse logistics' costs, and describe strategies used to reduce costs.

	7.7.3 Describe supply chain's impact on customer satisfaction and perceived value. 7.3.12 Assess distribution strategies (sales or stock performance, inventory status or performance) using performance metrics. 7.3.13 Conduct inventory valuation. 7.3.15 Describe how inventory management principles apply to intangible services (e.g., monitoring queues and capacity planning for website transactions such as insurance).